

WHAT IS CLAIMED IS:

1. A display device comprising:
display means for forming information; and
optical means for guiding the light from said
5 display means to the eye, said optical means including
a curved face for totally reflecting the light.
2. A display device according to claim 1, wherein
said optical means includes, in the order in the
10 proceeding direction of light, an entrance face for
introducing the light from said display means, said
curved face and a reflecting face for reflecting the
light toward the eye, wherein the light reflected by
said reflecting face is transmitted by said curved face
15 and reaches the eye.
3. A display device according to claim 1, wherein
said curved face has variable optical power depending
on the azimuthal angle.
- 20 4. A display device according to claim 1,
satisfying a condition $|\alpha| \leq 20^\circ$ wherein α is the angle
between the tangential line to said curved face at the
vertex thereof and a line perpendicular to the optical
25 axis of the eye.
5. A display device according to claim 1, further

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comprising:

illumination means for illuminating the eye; and
light-receiving means for receiving the light
reflected from the eye, for detecting the visual line
thereof.

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6. A display device according to claim 5, further
comprising:

control means for controlling the display state of
said display means, according to the light receiving
state of said photosensor means.

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7. A display device according to claim 2, wherein
said reflecting face is a half-transmitting face.

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8. A display device according to claim 2, wherein
said reflecting face has variable optical power
depending on the azimuthal angle.

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9. A display device comprising:

information forming means for forming an
information;

optical means for guiding a light of said
information forming means to an eye, in which said
optical means have a reflecting curved face decentered
having a positive optical power;

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illuminating means for illuminating said eye;

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converging means for converging a light of said
illuminating means reflected from said eye; and

detecting means for receiving a light from said
converging means to detect a state of said eye;

- 5 wherein where an imaging magnification of said
converging means is β , a following condition is
satisfied,

$$0.02 < |\beta| < 0.18.$$

- 10 10. A display device according to claim 9,
wherein said reflecting curved face has variable
optical power depending on the azimuthal angle.

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